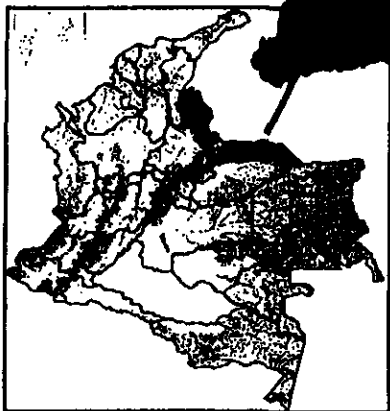


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Colombia

Infrastructure Security Strategy: Caño Limón Pipeline

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We are working with the GOC to reestablish state presence and provide security in Arauca Department, a major oil-producing region. U.S. Special Forces trainers are working with the Colombian Army to improve pipeline security through programs that focus on intelligence, reconnaissance, tactics and operational planning. Mobile police squadrons are being trained and equipped to pacify

conflictive areas. USAID is supporting construction of health and education facilities, as well as literacy and job creation programs for Arauca's civilian population. U.S. oil producer Occidental Petroleum is also investing in social assistance

Approximately 70 U.S. Special Forces trainers are in Arauca to train Colombian Army and Colombian National Police Units in accordance with funds appropriated by the 2002 Supplemental Appropriations Act.

Our pipeline protection program so far has helped Colombia's government focus greater attention on Arauca and has already sharply reduced the frequency and severity of attacks on the Caño Limón-Covenas oil pipeline - from 170 in 2001 to 41 in 2002. In addition, the training programs underway will continue to improve the overall capability of Colombian security forces. It will also improve their ability to protect economic infrastructure such as other pipelines and electrical transmission facilities throughout the country.

Background: The Caño Limón Oilfield and Pipeline

Social and economic development programs in violence-wracked areas of Colombia, including Arauca Department, face often insurmountable obstacles to their successful implementation unless adequate security can be provided. Development is made even more difficult when insufficient infrastructure and often weak or corrupt institutions add to the challenges.

In order to further its plans for social and economic development, the Government of Colombia identified 338 key infrastructure locations or installations that required improved protection as a result of sharply increased guerrilla attacks. It designated the Caño Limón pipeline as requiring the most pressing attention. Under a multi-phased infrastructure security plan, Colombia has asked the United States Government for

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training and equipment for its Armed Forces to begin the Caño Limón pipeline protection program.

Security for the Caño Limón pipeline is provided by the Colombian Army's 18th Brigade, augmented by 5th Mobile Brigade, as well as other military and police units.

- The pipeline's shutdown for almost seven months in 2001 cost Colombia approximately \$500 million in lost revenues and royalties (1/2% of GDP) and the attacks spilled 400,000 barrels of oil (about one and one-half times the amount discharged by the Exxon Valdez).
- The shutdown of the pipeline also crippled the government of the Department of Arauca, as 90% of its revenue base comes from oil royalties.

Since 1986 the pipeline has been hit over 940 times, with over 11 million barrels of oil spilled – causing serious ecological damages and an estimated \$2 billion in lost revenue.

The Caño Limón oilfield accounts for approximately 20% of Colombia's oil production. It is located in north-central Arauca department, straddling Colombia's northeast border with Venezuela. The field runs north/south approximately 8,000 feet beneath the Arauca River and is covered by hot and humid flatlands which, for the most part, are sparsely populated by small-scale farmers and ranchers. Total population of Arauca department is 250,000, of which 20,000 live in the department's municipality of the same name.

The Caño Limón production facility is approximately 10 kilometers from the Venezuelan border. From Caño Limón the pipeline carries oil northwest 770 kilometers through the departments of Boyaca, Norte de Santander, Cesar, Magdalena and Bolivar to the Caribbean port of Covenas in Sucre department.

Oil production at the Caño Limón oilfield is undertaken by the Cravo Norte Association (CNA), a for-profit joint venture between Colombia's state-owned oil company, Ecopetrol, and Occidental Petroleum Corporation (Oxy), a United States private company.

The CNA owns the production facilities, pipeline and Covenas terminal. According to its contract, Oxy manages oilfield production, while Ecopetrol operates the pipeline. Thus, 7/16 of CNA is owned by Oxy, 1/16 by Repsol and 8/16 by Ecopetrol.

Thousands of wells extract and transfer oil from the field to two nearby production facilities for separation of the oil from other liquids (primarily water). Oil is temporarily stored until sent to the pumping station for transport through the pipeline to

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Covenas. There is seven days storage capacity at Caño Limón, allowing extraction to continue even when the pipeline is temporarily shut down because of armed attacks against it. However, the increased attacks on the pipeline in 2001 overwhelmed the facility's storage capacity and oil pumping had to be suspended for more than 240 days last year.

Oil production at Caño Limón began in 1985. Daily average production has fallen from approximately 125,000 barrels per day in 1999 to 99,000 in 2000 and 54,000 in 2001, due primarily to pipeline attacks. Annual production at Caño Limón in 2001 was 19.5 million barrels. Proven oil reserves are an estimated 170 million barrels, but the field's oil production potential is estimated at 300 million barrels. Approximately 55% of oil produced at Caño Limón in 2001 was exported to the United States.

Revenues generated from oil production at Caño Limón are collected by the CNA in a joint account, which is then disbursed with 20 percent dedicated to royalties and the remainder divided between Ecopetrol, Occidental, and Repsol (through Occidental Petroleumcol and Occidental Petroleumandina) in accordance with their ownership portions.

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